2017 Fall Electrofishing Summary Report

White Lake (WBIC 272900)

Waupaca County

Introduction and Survey Objectives

In 2017, the Department of Natural Resources conducted a one night electrofishing survey of White Lake in order to provide insight and direction for the future fisheries management of this water body. Primary sampling objectives of this survey were to characterize species composition, relative abundance, and size structure. In particular, this survey was aimed at evaluating young of year (2017 year class) and age-1 (2016 year class) bluegill recruitment as a follow up to the survey in 2016 which showed few small bluegill in White Lake. The following report is a brief summary of the activities conducted, general status of fish populations, and future management options.

Acres: 1,064 Shoreline Miles: 5.94 Maximum Depth (feet): 11
Lake Type: Shallow Lowland Public Access: Three Public Boat Launches
Regulations: 25 Panfish may be kept, but only 10 of any one species. All other species follow statewide default regulations.

Survey Information							
Site location	Survey Date	Water Temperature (°F)	Target Species	Total Miles Shocked	Number of Stations	Gear	Number of Netters
White Lake	10/4/2017	65.5	All	1.5	3	Boomshocker	2

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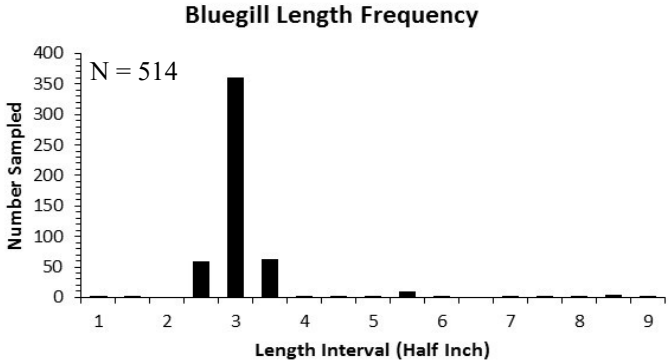
Survey Method

- White Lake was sampled according to fall electrofishing (FE) protocols as outlined in the statewide lake assessment plan. The primary objective for this sampling period is to count and measure young of year walleye and muskellunge. However, this survey can be used to sample young of year and juveniles of other species as well. Other gamefish may be sampled but are considered by-catch as part of this survey.
- Three different half mile sections of shoreline were sampled with a boomshocker. All fish captured were identified to species and panfish and gamefish were measured for length.

Summary

- A total of 582 fish from nine species were collected during our survey. The most frequently encountered species were bluegill (514) and yellow perch (38).
- Other fish species sampled in lower abundance included largemouth bass (8), northern pike (8), pumpkinseed (5), black crappie (4), yellow bullhead (3), brown bullhead (1), and central mudminnow (1).
- Bluegill made up 88% of the entire catch. Nearly 94% of the bluegill catch was between 2.5 - 4 inches, likely age-1 bluegills from the 2016 year class. Some harvestable size bluegills were captured. If the 2016 year class grows at the same rates observed in previous surveys of White Lake, they should grow to be 6 - 7 inches in the next year or two.
- Many yellow perch between 2 - 5 inches were captured. These fish could provide a quality yellow perch fishery in the next couple years.



Management Options

This survey was primarily intended to assess bluegill recruitment and year class strength. Other species are captured but different survey techniques may be more appropriate to assess their population metrics. Therefore, management recommendations are focused on panfish.

Panfish

- Bluegill have pulled off a very strong 2016 year class and some bluegill from the 2017 year class were also captured. These fish should grow to be harvestable size in the next couple of years. The special regulation put in place in 2016 should help protect some of these individuals from harvest once they grow larger.
- Winterkill and predation have likely caused year class failures in the past. Efforts should be made to maintain winter aeration to minimize the effects of winterkill. Additional management such as a special northern pike regulation should be explored to reduce the density of northern pike.

Other Management Objectives

- A comprehensive survey to re-evaluate the entire fish community in White Lake will be conducted in 2020. This comprehensive survey will include spring fyke netting and spring electrofishing surveys.